

REMARKS

In the Office Action mailed April 18, 2008, claims 3-5, 9-18 and 22-32 were allowed, and claims 1, 2, 6-8 and 21 were rejected. Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Garfunkel et al. (U.S. Pat. No. 6,085,406). Claims 2 and 21 were rejected under 35 U.S.C. §103(a) as being obvious over Garfunkel et al. in view of Fontana Jr. et al. (U.S. Pat. No. 6,609,948). Claims 6-8 were rejected under 35 U.S.C. §103(a) as being obvious over Garfunkel et al. in view of Shouji et al. (U.S. Pat. No. 5,722,157).

Allowed Claims

Claims 3-5, 9-18 and 22-32 were indicated to be allowed.

Claim Rejection – 35 U.S.C. §102(b)

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Garfunkel et al. (U.S. Pat. No. 6,085,406).

Amended independent claim 1 recites a method of forming a magnetoresistive (MR) reader with planar top shield topography and low parasitic resistance. The method includes defining a stripe height back edge of a MR sensor of the MR reader, depositing backfill adjacent to the stripe height back edge to a thickness at least as great as a thickness of the MR sensor, and subsequently defining a physical reader width of the MR sensor. According to amended independent claim 1, the physical reader width is defined by a distance between opposite side edges of the MR sensor. The thickness of the backfill is reduced to approximately the thickness of the MR sensor.

Garfunkel et al. discloses ion milling a back edge 324 of a read sensor 322 and then forming first and second side edges 330 and 332 of the sensor 322 with ion milling. (Garfunkel et al., col. 10, ln. 46 to col. 11, ln. 35; FIGS. 34- 38). Garfunkel et al. discloses that insulation refill material is provided to a thickness such that the refill material will be completely consumed during subsequent milling. (Garfunkel et al., col. 11, ll. 3-11; FIG. 36).

Garfunkel et al. fails to disclose each and every limitation of amended independent claim 1, because Garfunkel et al. fails to disclose backfill deposited adjacent to the back edge that has a thickness reduced to approximately a thickness of the MR sensor. Rather Garfunkel et al.

discloses an insulation refill material that is deposited but is later entirely consumed, that is, reduced far below a thickness approximately equal to a thickness of the sensor 322. Thus, the rejection of amended independent claim 1 under §102(b) should be withdrawn. Notification to that effect is requested.

Claim Rejections – 35 U.S.C. §103(a)

Claims 2 and 21 were rejected under 35 U.S.C. §103(a) as being obvious over Garfunkel et al. (U.S. Pat. No. 6,085,406) in view of Fontana Jr. et al. (U.S. Pat. No. 6,609,948). In addition, claims 6-8 were rejected under 35 U.S.C. §103(a) as being obvious over Garfunkel et al. (U.S. Pat. No. 6,085,406) in view of Shouji et al. (U.S. Pat. No. 5,722,157).

Claims 2, 6-8 and 21 all depend from amended independent claim 1, and include all of the limitations of that base claim. Therefore, for the reasons given above with respect to amended independent claim 1, dependent claims 2, 6-8 and 21 are likewise allowable over the cited art because neither Fontana Jr. et al. nor Shouji et al. supplies the missing limitations of Garfunkel et al. Moreover, a person of ordinary skill in the art would not have been motivated or known how to combine the teachings of Garfunkel et al. with the other cited references to arrive at the method recited by those claims. Thus, the rejections of dependent claims 2, 6-8 and 21 should be withdrawn. Notification to that effect is requested.

CONCLUSION

All of the claims are now in condition for allowance. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,
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